

# Veterinary Science: Veterinary Assistant

<b>Levels:</b>	<b>Grades 11-12</b>
<b>Units of Credit:</b>	<b>1.00</b>
<b>CIP Code:</b>	<b>02.0231</b>
<b>Core Code:</b>	<b>30-02-00-00-090</b>
<b>Prerequisite:</b>	<b>Biology</b>
<b>Skill Test:</b>	<b>None</b>

## **COURSE DESCRIPTION**

This course provides the opportunity for students to explore different avenues of the veterinary profession. Students will be exposed to veterinary science and principles which include anatomy, physiology, chemistry, animal health and disease, dentistry and laboratory procedures. Students will provide hands-on care as they develop skills in the areas of surgical assisting, bandaging, wound care, oral care, and general nursing care.

## **CORE STANDARDS, OBJECTIVES, AND INDICATORS**

### **STANDARD 1**

**Students will understand the role of FFA/HOSA in Agricultural Education**

**Objective 1:** Students will explain the purpose of leadership opportunities associated with FFA/HOSA

**Objective 2:** Students will have the opportunity to participate in both veterinarian-related and leadership events with FFA/HOSA

**Objective 3:** Students will understand the professionalism requirements related to FFA/HOSA participation.

**Objective 4:** Students will be able to describe how FFA/HOSA develops leadership skills, personal growth, and career success.

**Objective 5:** Students will understand the history and organization of FFA/HOSA.

### **STANDARD 2**

**Students will participate in a Supervised Agricultural Experience (SAE) program.**

**Objective 1:** Students will prepare for an externship opportunity by developing skills that will be used in the veterinary clinic.

**Objective 2:** Students will understand the level of professionalism required for participation in an externship portion of the program. This includes appropriate dress, grooming, attitude, and performance.

**Objective 3:** Students will pass off required skills while working at their externship site.

**Objective 4:** Students will develop excellent professionalism, work skills, and work habits during the externship experience

### **STANDARD 3**

**Students will demonstrate an understanding of safe practices in the clinical setting.**

**Objective 1:** Students will gain an understanding of appropriate infection control practices.

**Objective 2:** Students will correctly demonstrate infection control practices, such as handwashing, gowning, gloving, and masking.

**Objective 3:** Students will explain steps that need to be taken to avoid cross-contamination between animals.

**Objective 4:** Students will learn to follow safe practices at all times to avoid injury to themselves or others.

**Objective 5:** Students will demonstrate appropriate handling and disposal of biohazardous waste.

**Objective 6:** Students will demonstrate appropriate use and disposal of needles and other sharps.

#### **STANDARD 4**

**Students will demonstrate an understanding of medical terminology, in order to be able to appropriately discuss and read medical information.**

**Objective 1:** Students will be able to define medical terms related to each body system.

**Objective 2:** Students will be able to identify prefixes, suffixes, and root words, in order to define medical terms.

**Objective 3:** Students will be able to interpret and extract information from realistic medical documents.

**Objective 4:** Students will interpret and apply medical abbreviations and symbols.

#### **STANDARD 5**

**Students will demonstrate an understanding of animal anatomy and physiology.**

**Objective 1:** Students will dissect preserved cats, or other appropriate animals, in order to gain an understanding of animal anatomy and physiology.

**Objective 2:** Students will be able to correctly identify superficial muscles that are involved in the movement of an animal.

**Objective 3:** Students will learn the bones in the body and be able to identify them on skeletal models.

**Objective 4:** Students will be able to identify various body parts and organs.

**Objective 5:** Students will be able to compare the anatomy of different species of animals, to include small animals, large animals, laboratory animals, and exotic animals.

**Objective 6:** Students will be able to describe the basic physiology involved in the functioning of each body system.

#### **STANDARD 6**

**Students will explore concepts in health management and disease.**

**Objective 1:** Students will know the common vaccines, how to administer the vaccines, and when to give them.

**Objective 2:** Students will identify and describe common animal diseases.

**Objective 3:** Students will understand the purposes of basic treatments for common animal diseases.

**Objective 4:** Students will demonstrate the ability to provide treatments for common animal diseases.

**Objective 5:** Students will identify medications used to treat common animal diseases.

**Objective 6:** Students will know the common zoonotic diseases and the precautions needed to prevent these diseases.

#### **STANDARD 7**

**Students will express an understanding of the fundamental principles of veterinary medicine and be able to demonstrate proficiency in each area.**

**Objective 1:** Students will study and develop an understanding of animal behavior.

**Objective 2:** Students will understand the principles of restraint/handling techniques and be able to demonstrate safe restraint/handling practices on small, exotic, and large animals.

**Objective 3:** Students will be able to correctly perform breed identification.

**Objective 4:** Students will be able to accurately take a preliminary history from a client and perform a basic physical examination, to include vital signs and other necessary assessments.

**Objective 5:** Students will know the basic nutritional requirements for each species of animal.

**Objective 6:** Students will be able to accurately assess wounds and provide appropriate wound care and management.

**Objective 7:** Students will know the materials needed and how to apply common splints, casts, and bandages on animals.

#### **STANDARD 8**

**Students will develop a basic understanding of medication administration.**

**Objective 1:** Students will be able to name common medications used in veterinary practice.

**Objective 2:** Students will be able to demonstrate appropriate administration of oral, topical, and injectable medications.

**Objective 3:** Students will be able to demonstrate how to correctly determine appropriate medication dosages.

**Objective 4:** Students will be able to recognize and know how to treat adverse effects of medications.

**Objective 5:** Students will be able to identify contraindications for administering certain medications.

#### **STANDARD 9**

**Students will demonstrate proficiency in the office procedures related to veterinary practice.**

**Objective 1:** Students will appropriately demonstrate the ability to communicate with and educate clients.

**Objective 2:** Students will demonstrate appropriate telephone etiquette.

**Objective 3:** Students will demonstrate accurate record keeping and filing.

**Objective 4:** Students will understand OSHA standards and be able to demonstrate safe practices in the veterinary setting.

**Objective 5:** Students will demonstrate the ability to accurately complete health certificates and medical forms.

**Objective 6:** Students will demonstrate appropriate job seeking skills.

**Objective 7:** Students will demonstrate an understanding of euthanasia procedures and the ability to provide grief support.

#### **STANDARD 10**

**Students will study and demonstrate the ability to perform surgical procedures while maintaining sterile technique.**

**Objective 1:** Students will verbalize understanding of surgical and aseptic principles.

**Objective 2:** Students will be able to accurately identify surgical instruments.

**Objective 3:** Students will correctly demonstrate preparation for surgical procedures, to include preparing and sterilizing equipment and preparing the patient for surgery.

**Objective 4:** Students will demonstrate an understanding of how to maintain a sterile zone during surgery.

**Objective 5:** Students will demonstrate the ability to assist with common surgical procedures.

**Objective 6:** Students will be able to perform basic suture patterns.

#### **STANDARD 11**

**Students will study and demonstrate an ability to perform laboratory procedures.**

**Objective 1:** Students will demonstrate an understanding of concepts and the ability to perform skills related to microbiology.

**Objective 2:** Students will demonstrate an understanding of concepts and the ability to perform skills related to hematology.

**Objective 3:** Students will demonstrate an understanding of concepts and the ability to perform skills related to parasitology.

**Objective 4:** Students will demonstrate an understanding of concepts and the ability to perform skills related to urinalyses and other animal laboratory tests.

#### **STANDARD 12**

**Students will demonstrate an ability to identify, treat and manage exotic and laboratory animals.**

**Objective 1:** Students will correctly identify exotic and laboratory animals.

**Objective 2:** Students will be able to identify the care required by various exotic and laboratory animals.

**Objective 3:** Students will know the husbandry requirements for common exotic and laboratory animals.

**Objective 4:** Students will be able to identify common problems seen in the exotic and laboratory species.

### **STANDARD 13**

**Students will study and prepare for career opportunities in Veterinary science.**

**Objective 1:** Students will match interests and aptitudes to an occupational area.

**Objective 2:** Students will develop goals related to future employment.

**Objective 3:** Students will obtain education needed for a job.

**Objective 4:** Students will identify occupational competencies.

**Objective 5:** Students will identify schooling requirements that must be met in order to prepare for future employment.

**Objective 6:** Students will create a resume and develop interviewing skills, essential to obtaining a position in the veterinary field.

### **STANDARD 14**

**Students will study and understand the various disciplines in the field of veterinary medicine.**

**Objective 1:** Students will understand the skills needed and career options available in the field of veterinary dentistry.

**Objective 2:** Students will understand the skills needed and career options available in the field of veterinary pediatrics.

**Objective 3:** Students will understand the skills needed and career options available in the field of veterinary geriatrics.

**Objective 4:** Students will understand the skills needed and career options available in the field of veterinary immunology.

### **STANDARD 15**

**Students will express an understanding of veterinary laws and ethics.**

**Objective 1:** Students will understand the laws that govern veterinary medicine.

**Objective 2:** Students will recognize the legality of the veterinary-client-patient relationship.

**Objective 3:** Students will be able to identify the various associations available in the veterinary field.

**Objective 4:** Students will understand the laws governing animal abuse and know how to appropriately report cases of animal abuse.

**Objective 5:** Students will demonstrate an understanding of veterinary laws and ethics by analyzing case studies and identifying how laws and rules apply to these cases.